



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,942	06/26/2003	Tsutomu Shiraishi	K06-158456M/TBS	3411
21254	7590	08/16/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,942

Applicant(s)

SHIRAISHI ET AL.

Examiner

Rodney H. Bonck

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The following action is in response to the amendment and Request for Continued Examination received July 5, 2005.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis for "the shell-type annular outer ring fitting member", recited in line 2 of claim 6. There is an outer ring fitting member (housing 2) and there is a shell-type annular outer ring 11, but no shell-type annular outer ring fitting member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 3681

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashio et al.('705) in view of either Japanese document (JP 2-56528 B2) or Takamatsu et al.('305). The Kashio et al. device discloses a one-way clutch comprising an outer ring fitting member 2 having a hole in which a recess portion (between projections 11 in Fig. 13) is formed, a shaft 8, an annular outer member 1 having cam faces 7, a plurality of rollers 3, and an annular retainer 4,19. The retainer has an axially projected portion 19 and a projection 18 projecting radially from the axial projection for engaging in the recess portion to prevent relative rotation between the retainer and the outer ring fitting member. The retainer further includes a plurality of urging members 20. The number of radial projections in Kashio et al. corresponds to the number of recess portions between the projections 11 in the outer ring fitting member. The outer ring 1 also includes a plurality of expanded portions (between recesses 10) for receipt in the recesses between projections 11 in the outer ring fitting member. The surfaces of the projections on the retainer and the corresponding surfaces of the recess portions that engage each other are substantially planar, at least at the surface of engagement. Claim 1 now

Art Unit: 3681

defines the annular outer ring as "a thin plate forming a shell-like annular outer ring".

The outer ring 1 of Kashio et al. can be considered a thin plate and can be considered shell-type, insofar as these terms are defined. Furthermore, applicant has already acknowledged that thin plate, shell-type annular outer rings are known as discussed on pages 1-4 of the specification and shown in the Japanese ('528) document (of record). Takamatsu et al. (of record) also shows a shell-type outer ring at 1b. Even if outer ring 1 of Kashio et al. were not considered to be a thin plate, shell-type outer ring, it would have been obvious to provide such an outer ring in Kashio et al. as suggested by the Japanese document and Takamatsu et al. documents, the motivation being to provide a lighter, more easily fabricated outer ring. Claim 1 also now recites that each of the cam faces "includes an expanded portion formed by expanding a cylindrical portion of said thin plate to an outer peripheral side to recess an inner face side thereof". A method of forming the cam faces would not carry patentable weight in these claims to a one-way clutch. Even if given weight, though, this method is taught by both the Japanese ('528) document and by Takamatsu et al. Regarding claims 10 and 16, outer ring 1 of Kashio et al. can be considered a "thin plate" as now claimed; but, as noted above, both the Japanese ('528) document and Takamatsu et al. suggest using thin plate structure for the outer ring. Thus this added limitation would not patentably distinguish over the art even if outer ring 1 of Kashio et al. were itself not considered a thin plate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kurita et al.('110), Iga('706), and Jeong('656) are cited to show thin plate, shell-type outer rings. Jeong is also cited to show projection 52, and Kemp('516) is cited to show projection 8.

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the rejection of claims 6 and 7 under 35 USC 112, second paragraph, applicants' amendment creates a different indefiniteness problem by referring to the shell-type annular outer ring fitting member without proper antecedent basis.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb
August 12, 2005